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QUIZZES

Practice Test-1(Electrochemistry)



7 Questions



7 min

Topics

Oxidative number or state, Balancing of redox equations by ion-electron method, Balancing redox equations by oxidation number change method

Start Quiz

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06 : 58



1/7



7 min



Hint

Q : The oxidation no. of hydrogen in NaH is

A

+1

B

-1

C

0

D

all of these

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1

2

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4

5

6

7

06 : 53



2/7



7 min



Hint

Q : The oxidation state of group 1A metals is ____ and that of group 2A is ____.

A

+1/-2

B

-1/-2

C

+1/+2

D

none of these

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06 : 48



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3/7



7 min



Hint

Q : The oxidation no. of Mn in MnO_4^{-2} is

A

+4

B

+5

C

+6

D

-6

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7

06 : 43



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4/7



7 min



Hint

Q : To balance oxygen in ion electron method in acidic solution, we add

A

ion

B

ion

C

H_2O

D

O_2

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06 : 39



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5/7

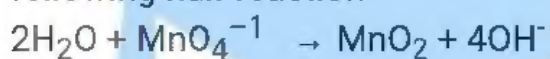


7 min



Hint

Q : How many electrons are required to balance the following half reaction



A

 2e^{-1} on left side

B

 2e^{-1} on right side

C

 3e^{-1} on right side

D

 3e^{-1} on left side

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1

2

3

4

5

6

7

06 : 34



6/7



7 min



Hint

Q :

HBr is formed when bromine reacts with molecular hydrogen at high temperature.

$\text{H}_2 + \text{Br}_2 \rightarrow 2\text{HBr}$, the reaction is an example of

A

Disproportionation

B

Reduction

C

Oxidation

D

Redox

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1

2

3

4

5

6

7

06 : 29



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7/7



7 min



Hint

Q : Which is true about the reaction $\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$

A

Mg is reduced

B

Mg is oxidized

C

Cl_2 is oxidized

D

Cl_2 is reducing agent

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1

2

3

4

5

6

7



QUIZ RESULT

Practice Test-1(Electrochemistry)



7



7 min



01-May-2021



0 sec



0/7



0.0%

Result Detail

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Practice Test-1(Electrochemistry)



Correct



Unattempted



Incorrect



1/7

Q : The oxidation no. of hydrogen in NaH is

A

+1

B

-1

C

0

D

all of these

Explanation

Oxidation number of hydrogen in metal hydrides is "-1".



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1

2

3

4

5

6

7



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Correct



Correctness



Incorrect



2/7

Q : The oxidation state of group 1A metals is ____ and that of group 2A is ____.



+1/-2



-1/-2



+1/+2



none of these

Explanation

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Group number is O.N. of 1 and 2.



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correct



3/7

Q : The oxidation no. of Mn in MnO_4^{-2} is



+4



+5



+6



-6

Explanation

$$\text{Mn} + 4\text{O} = -2$$

$$\text{Mn} + (-8) = -2$$

$$\text{Mn} = -2 + 8 = 6$$



Correct



Question/Answer



Incorrect



4/7

Q : To balance oxygen in ion electron method in acidic solution, we add



ion



ion



H_2O



O_2

Explanation

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In ion method to balance 'O' atoms water molecules added.

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Correct

:

Unattempted



Incorrect



5/7

Q : How many electrons are required to balance the following half reaction



$2e^{-1}$ on left side



$2e^{-1}$ on right side



$3e^{-1}$ on right side



$3e^{-1}$ on left side

Explanation

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Net charge on left side is -1 & on right side it has -4 charge, so to balance the charge 3 electrons are added to the left side.



Correct

:

Unattempted



Incorrect



6/7

Q:

HBr is formed when bromine reacts with molecular hydrogen at high temperature.

$\text{H}_2 + \text{Br}_2 \rightarrow 2\text{HBr}$, the reaction is an example of



Disproportionation



Reduction



Oxidation



Redox

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Explanation

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O.S of hydrogen change 0 to +1 and the O.S of bromine change 0 to -1. So, oxidation and reduction both takes place. It is the example of redox reaction



correct



7/7

Q . Which is true about the reaction $\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$



Mg is reduced



Mg is oxidized



Cl_2 is oxidized



Cl_2 is reducing agent

Explanation

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Mg is oxidized from 0 to +2



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QUIZZES

Practice test-2(Electrochemistry)

100 Questions

1 hour

Topics

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Q : The direction of flow of electrons through external circuit in electrolytic cell is from

- ☐ Anode to cathode
- ☒ Cathode to anode
- ☐ Do not flow in external circuit
- ☐ Vary from cell to cell

SAEED MDCAT

SAEED MDCAT TEAM

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Q : The products of electrolysis of dilute aqueous sodium nitrate are

- ☐ Na and O_2
- ☒ H_2 and NO_2
- ☐ H_2 and O_2
- ☐ Na and NO_2

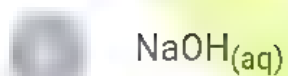
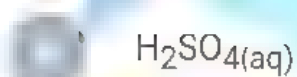
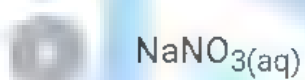
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Q : The product of electrolysis will not be same in the case of



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Q : Temperature for the measurement of standard electrode potential is

☐ 298K

☒ 300K

☐ 30°C

☐ 310K

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Q : The standard electrode potential is measured by

- ☐ Electrometer
- ☐ Voltmeter
- ☐ Galvanometer
- ☐ Polarimeter

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Q : A standard hydrogen electrode has zero electrode potential because

- ☐ A Hydrogen is easier to oxidize
- ☐ B This electrode potential is assumed to be zero
- ☐ C Hydrogen atom has only one electron
- ☐ D Hydrogen is the lightest element

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Q : Metal that deposits at cathode when aqueous solution of its salt is electrolysed



Na



Cu



Zn



Sn

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QUIZ RESULT

Practice test-2(Electrochemistry)



Time



Time



0/10

0%

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Correct



Unattempted



Incorrect



1/10

Q : The direction of flow of electrons through external circuit in electrolytic cell is from



Anode to cathode



Cathode to anode



Do not flow in external circuit



Vary from cell to cell

Explanation

SAEED MDCAT TEAM

In electrolytic cell the direction of flow of electrons through external circuit is from anode to cathode

SAEEDMDCAT



Correct



Unattempted



Incorrect



2/10

Q : The products of electrolysis of dilute aqueous sodium nitrate are



Na and O_2



H_2 and NO_2



H_2 and O_2



Na and NO_2

Explanation

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In case of sodium nitrate, salt remains unchanged and water will be hydrolysed, due to lower reduction potential of Na ion as compared to H ion, for anode, OH^- has higher oxidation potential as compared to nitrate ions.



Correct



Unattempted



Incorrect



3/10

Q : The product of electrolysis will not be same in the case of



$\text{NaNO}_3(\text{aq})$



$\text{H}_2\text{SO}_4(\text{aq})$



$\text{NaOH}(\text{aq})$



$\text{CuSO}_4(\text{aq})$

Explanation

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In all other options salt remains unchanged, while in case of copper sulphate product will be different at cathode, that is Cu metal.



Correct



Question



Incorrect



4/10

Q : Temperature for the measurement of standard electrode potential is



298K



300K



30°C



310K

Explanation

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$25^{\circ}\text{C} = 298\text{K}$



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Correct



Unanswered



Incorrect



5/10

Q : The standard electrode potential is measured by



Electrometer



Voltmeter



Galvanometer



Polarimeter

Explanation

The standard electrode potential is measured by Voltmeter



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Correct



Unattempted



Incorrect



6/10

Q : A standard hydrogen electrode has zero electrode potential because



Hydrogen is easier to oxidize



This electrode potential is assumed to be zero



Hydrogen atom has only one electron



Hydrogen is the lightest element

Explanation

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This electrode potential is assumed to be zero



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Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



7/10

Q : Metal that deposits at cathode when aqueous solution of its salt is electrolysed



Na



Cu



Zn



Sn

Explanation

Reduction potential of Cu is higher (+0.34) then other given options and deposit on cathode.



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1

2

3

4

5

6

7



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



8/10

Q : Metals are strong ____agents and the non-metals are strong____ agents.

A

Oxidizing/reducing

B

Reducing/oxidizing

C

Oxidizing/oxidizing

D

Reducing/reducing

Explanation

Metals prefer to lose electron and non-metals prefer to gain electron.



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Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



9/10

Q : Group 1 metals are _____ reactive than group 2 metals.



More



Less



Equal



No relation

Explanation

Group 1 metal have only one in valence shell and lose easily whereas 2nd group members have 2 valence and are less reactive than group 1 member



Practice test-2(Electrochemistry)



Correct



Unattempted



Incorrect



10/10

Q:

Which gas will be evolved at cathode during electrolysis of aq. CuCl_2 solution

A

H_2

B

Cl_2

C

Cu

D

None of these

Explanation

At cathode, Cu metal will be deposited so no gas evolves at cathode.